

Docket No. 742114-11

Serial No. 09/283,587

Page 8

REMARKS

By the above actions, claims 11, 12, 23, and 24 have been amended. In view of these actions and the following remarks, further consideration of this application is now requested.

The Examiner's allowance of claims 1-10, 14-22 and 25 as well as her indication of allowable subject matter with respect to claims 12 and 24 have been noted with appreciation. Accordingly, claims 12 and 24 have been rewritten in allowable independent form, so that formal allowance thereof is in order.

Claims 23 has again been rejected under 35 U.S.C. § 102 as being anticipated by the disclosure of the Harley patent, while claim 11 (and evidently also claim 13 even though not included in the statement of the rejection; compare the first line of item 4 on page 3 of the action with the next-to-last line of page 3) have again been rejected under 35 U.S.C. § 103 with Nyquist evidently being applied in combination with Harley with respect to claim 13. This rejection is not understood given the differences between the Hurley patent and the present invention noted in applicant's preceding response which are hereby incorporated by reference for the sake of brevity. However, given the Examiner's comment in her response to applicant's arguments, in item 7 on page 4, that Harley was still being applied because the claim language was not considered to "exclusively limit an auscultation signal from being more than one single channel," claims 11 and 23 have been amended to indicate that the auscultation signal is received "from a single channel input obtained from a single sensor." In this regard, the Examiner's attention is directed to the fact that Harley shows in Fig. 4 and describes in column 5, lines 13-29 and 41-52 is designed to operate with multiple sensors. This difference is directly related to the fact that the present invention and the Harley patent are directed to the solving of two entirely different problems. Harley expressly discloses that he uses his digital signal processor for noise reduction purposes (see, e.g., col. 5, lines 41-52), while the present invention uses its digital signal processor for estimating a rhythm, e.g., a cardiac rhythm. Simply put, Harley's concept could be utilized *in addition to* that of the present invention to improve noise reduction *but could not be used in place of* applicant's invention for estimating a rhythm since one has nothing to do with the other, and the mere fact that both use a digital signal processor does not change this fact.

As for the Nyquist patent, it cannot make up for the shortcomings of Harley, even if its teachings were applicable to his device, and established what the Examiner asserts that it

Docket No. 742114-11  
Serial No. 09/283,587  
Page 9

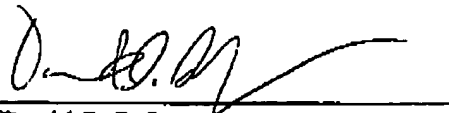
does, which is submitted not to be the case. In this regard, it is noted that a frequency that is less than 20kHz is not necessarily less than 2kHz, e.g., 15kHz is less than 20kHz but much greater than 2kHz. Furthermore, the audible frequency range is:

**Audible frequency range:** The range of sound frequencies normally heard by the human ear. The audible range spans from 20Hz to 20,000Hz as indicated in the Acoustic Terms & Definitions that can be found on the webpage located that the URL: <http://www.owenscorning.com/around/sound/glossary.asp> . Thus, it is not seen how such would suggest evaluation of a frequency range of interest that is a frequency range of less than 2kHz.

Therefore, it is submitted that claims 11, 13, and 23 are also patentable over the prior art, so that the rejections thereof should now be withdrawn, and such action is hereby requested.

While the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise, which could be eliminated through discussions with applicant's representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Respectfully submitted,



David S. Safran  
Registration No. 27,997

Customer No. 25570

Roberts Mlotkowski & Hobbes P.C.  
P.O. Box 10064  
McLean, VA 22102

Direct Telephone: (703) 584-3273

DSS:kmm